

Product datasheet for **RC205546**

SLC25A31 (NM_031291) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	SLC25A31
Synonyms:	AAC4; ANT 4; ANT4; SFEC35kDa
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205546 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCATCGTGAGCCTGCGAAAAAGAAGGCAGAAAGCGGCTGTTGACGCCTCATCCTTCGGAAGGACC
 TTCTGGCCGGCGGAGTCGCGGCAGCTGTGTCCAAGACAGCGGTGGCGCCCATCGAGCGGGTGAAGCTGCT
 GCTGCAGGTGCAGGCGTCGTGAAGCAGATCAGCCCCGAGGCGCGGTACAAAGGCATGGTGGACTGCCTG
 GTGCGGATTCCTCGCGAGCAGGGTTTCTCAGTTTTTGGCGTGGCAATTTGGCAAATGTTATTCGGTATT
 TTCCAACACAAGCTCTAACTTTGCTTTTAAGGACAAATACAAGCAGCTATTCATGTCTGGAGTTAATAA
 AGAAAAACAGTTCTGGAGGTGGTTTTTGGCAAACCTGGCTTCTGGTGGAGCTGCTGGGGCAACATCCTTA
 TGTGTAGTATATCCTCTAGATTTTGCCCGAACCCGATTAGGTGTCGATATTGAAAAGGTCTGAGGAGC
 GACAATTCAAGGGTTTAGGTGACTGTATTATGAAAATAGCAAAATCAGATGGAATTGCTGGTTTATACCA
 AGGGTTTGGTGTTCAGTACAGGCATCATTGTGTACCGAGCCTCTATTTTGGAGCTTATGACACAGTT
 AAGGGTTTATTACCAAAGCCAAAGAAACTCCATTTCTGTCTCCTTTTTCATTGCTCAAGTTGTGACTA
 CATGCTCTGGAATACTTTCTATCCCTTTGACACAGTTAGAAGACGTATGATGATGCAGAGTGGTGAGGC
 TAAACGGCAATATAAAGGAACCTTAGACTGCTTTGTGAAGATATACCAACATGAAGGAATCAGTTCCTTT
 TTTCTGGCGCCTTCTCAATGTTCTTCGCGGTACAGGGGTGCTTTGGTGTGATTATATGATAAAA
 TTAAGAATTCTTCATATTGATATTGGTGGTAGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >RC205546 protein sequence
 Red=Cloning site Green=Tags(s)

MHREPAKKKAERLFDASSFGKDLLAGGVAAVSKTAVAPIERVKLLQVQASSKQISPEARYKGMVDCL
 VRIPREQGFFSFWRGNLANVIRYFPTQALNFAFKDKYQLFMSGVNKEQFWRWFLANLASGGAAGATSL
 CVVYPLDFARTRLGVDIGKGPEERQFKGLGDCIMKIAKSDGIAGLYQGFVSVQGIIVYRASYFGAYDTV
 KGLLPKPKKTPFLVSFFIAQVVTTCGILSYPFDTVRRRMMMQSGEAKRQYKGTLD CFVKIYQHEGISSF
 FRGAFSNVLRGTGGALVLYLDKIKEFFHIDIGGR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6314_f05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_031291

ORF Size: 945 bp

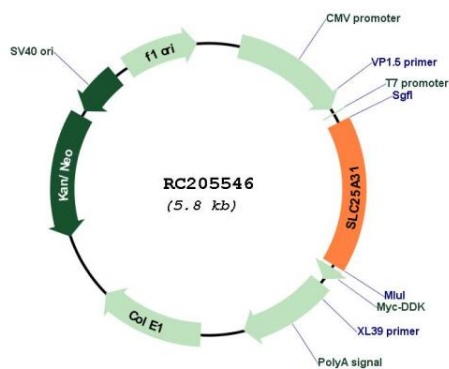
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

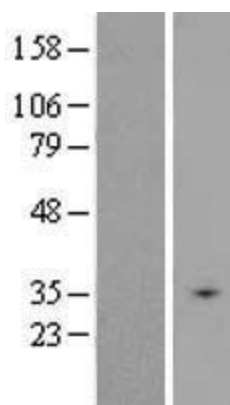
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_031291.4</u>
RefSeq Size:	1821 bp
RefSeq ORF:	948 bp
Locus ID:	83447
UniProt ID:	<u>Q9H0C2</u>
Cytogenetics:	4q28.1
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Calcium signaling pathway, Huntington's disease, Parkinson's disease
MW:	35 kDa
Gene Summary:	The protein encoded by this gene is a member of the ADP/ATP carrier family of proteins that exchange cytosolic ADP for matrix ATP in the mitochondria. Cells over-expressing this gene have been shown to display an anti-apoptotic phenotype. This protein is also thought to play a role in spermatogenesis, where it is believed to associate with a part of the flagellar cytoskeleton and with glycolytic enzymes. Male mice with mutations in the mouse ortholog of this gene are sterile and spermatocytes display an early meiotic arrest phenotype. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jan 2016]

Product images:



Circular map for RC205546



Western blot validation of overexpression lysate (Cat# [LY410565]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205546 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).